

AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) Silanised, structurally modified pyrogenically produced silicas, according to claim 2, 5 or 6 characterized by surfaces having fixed thereto vinyl groups or vinyl silyl groups, hydrophobic groups selected from trimethyl silyl, dimethyl silyl, monomethyl silyl or mixtures thereof, and by the following physico-chemical properties:

BET surface area m²/g: between 103 – 400

Average primary

Particle size nm: 5-50

pH: 3-10

C content: between 0.1-10

DBP value %: < 200 or not determinable.

2. (Currently amended) The process for producing the silanised, structurally modified silicas according to claim 1, comprising a) treating pyrogenically produced silicas with a surface-modifying agent(s) in either vapor or spray form, wherein the modifying agent(s) is suitable for fixing vinyl groups or vinyl silyl groups and hydrophobic groups selected from dimethyl silyl, dimethyl silyl, monomethyl silyl or mixtures thereof to the surface of the silica, to form a mixture, b) heat treating the surface agent- modified silica mixture, c) structurally modifying the heat treated surface agent modified silica mixture by mechanical action to form low structured, surface agent-modified pyrogenic silica and d) recovering the silanized, structurally modified pyrogenic silica, having surfaces fixed thereto vinyl groups or vinyl silyl groups, and hydrophobic groups selected from trimethyl silyl, dimethyl silyl, monomethyl silyl or mixtures thereof.

3. (Previously presented) The process for producing the silanised, structurally modified silicas according to claim 2, wherein the silica treating step includes spraying the silicas first with water and then with the surface-modifying agent.
4. (Previously presented) The process for producing the silanised, structurally modified silica according to claim 2, wherein the silica treating step includes treating the silica with the surface modifying agent in vapor form.
5. (Previously presented) The process for producing the silanised, structurally modified silica according to claim 3, further comprising post-grinding and conditioning the structurally modified silica.
6. (Previously presented) The process for producing the silanised, structurally modified silica according to claim 4, further comprising post-grinding and conditioning the structurally modified silica.
7. (Previously presented) A silicone rubber containing as a filler the silanized, structurally modified silica according to claim 1.
8. (Previously presented) The process according to claim 3, further comprising, prior to heat treatment step, further mixing the treated silica mixture.